

PATENT
ATTORNEY DOCKET NO. 46884-5497

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Kazuhiro ATSUMI et al.)	Confirmation No.: Unassigned
)	
Application No.: 10/585,451)	Group Art Unit: Unassigned
)	
Filed: July 7, 2006)	Examiner: Unassigned
)	
For: LASER PROCESSING METHOD AND)	
DEVICE)	

Commissioner for Patents
U.S. Patent and Trademark Office
Alexandria, VA 22314

Sir:

**SUBMISSION OF INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

Applicants bring to the attention of the Examiner the attached document.

Attached is an English-language translation of an International Preliminary Examination Report ("IPER") dated August 31, 2006 that issued in a related PCT/JP2004/018591 application. Applicants respectfully request that the Examiner consider the IPER as it relates to the above-identified application.

While the IPER cites to three particular documents, these documents are not attached hereto because they were previously filed in an Information Disclosure Statement in this application on July 7, 2006.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed document is material or constitute "prior art." If it should be determined that the listed document does not constitute "prior art" under United

States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such document.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

DRINKER, BIDDLE & REATH LLP

Dated: February 2, 2007

By: 

Peter J. Sistare

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Customer Window Mail Stop: ☒ Amendment ☐ AF ☐ Issue Fee
Alexandria, VA 22314

Sir:

INFORMATION DISCLOSURE STATEMENT (IDS)

☒ **Under 37 C.F.R. § 1.97(b):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. To the undersigned's knowledge, this IDS is being filed before the mailing date of a first Office Action on the merits, before the mailing date of a first Office Action on the merits after filing an RCE under § 1.114, or within three months of the application filing date.

☐ **Under 37 C.F.R. § 1.97(c):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(b) but, to the undersigned's knowledge, before the mailing date of a Final Office Action, a Notice of Allowance, or another action that closes prosecution in the application.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; or

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ **Under 37 C.F.R. § 1.97(d):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(c) but before payment of the issue fee.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; and

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ **Under 37 C.F.R. § 1.97(i)**: Pursuant to 37 C.F.R. §§ 1.56 and 1.97(i), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(d). Applicant requests that the IDS be placed in the file.

☐ A search report or other listing of documents from a counterpart, related, or other application dated _____ and having documents cited thereon is attached for the Examiner's consideration. Any of these documents not previously cited, and any additional documents are listed on the PTO Form 1449.

☒ Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. As for any document listed on the accompanying PTO-1449 that is in a language other than English, relevance can be understood from an enclosed English abstract or at least partial translation or from mention in the specification or in a search report for a corresponding application. Furthermore, Japanese Patent Publication Kou-shou 46-24989 was cited in a Notice of Refusal issued on November 2, 2004, in the opposition stage of a related Japanese patent. The Japanese Appeal Examiner asserted that: "This document discloses a method of separating a semiconductor substrate made of silicon or germanium and on which many electronic circuits and device are formed, by thermal impact caused by a laser irradiation."

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that any of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should any of the documents be applied against the claims of the present application.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this Application, including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required and including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

DRINKER, BIDDLE & REATH LLP



Peter J. Sistare

Registration No. 48,183

Dated: February 2, 2007

CUSTOMER NO. 055694

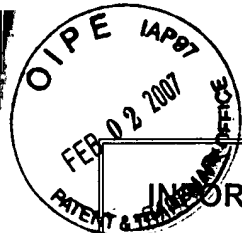
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DCV591355V1

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

Page 1 of 1

PTO Form 1449

Attorney Docket No.

46884-5497

Application No.:

10/585,451

Applicant(s):

Kazuhiro ATSUMI et al.

Page 1 of 2

Filing Date:

July 7, 2006

Group Art Unit:

U.S. PUBLICATION DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
	4,562,333	Dec. 31, 1985	Taub et al.	-	-	
	5,254,833	Oct. 19, 1993	Okiyama	-	-	
	5,543,365	Aug. 6, 1996	Wills et al.	-	-	
	5,622,540	Apr. 22, 1997	Stevens	-	-	
	5,637,244	Jun. 10, 1997	Erokhin	-	-	
	5,776,220	Jul. 7, 1998	Allaire et al.	-	-	
	5,826,772	Oct. 27, 1998	Ariglio et al.	-	-	
	6,211,488	Apr. 3, 2001	Hoekstra et al.	-	-	
	6,252,197	Jun. 26, 2001	Hoekstra et al.	-	-	
	6,257,224	Jul. 10, 2001	Yoshino et al.	-	-	
	6,259,058	Jul. 10, 2001	Hoekstra	-	-	
	6,322,958	Nov. 27, 2001	Hayashi	-	-	
	6,420,678	Jul. 16, 2002	Hoekstra	-	-	
	6,489,588	Dec. 3, 2002	Hoekstra et al.	-	-	
	US2002/0006765	Jan. 17, 2002	Michel et al.	-	-	
	US2003/0024909	Feb. 6, 2003	Hoekstra et al.	-	-	
	6,055,829	May 2, 2000	Witzmann et al.	-	-	
	6,175,096 B1	Jan. 1, 2001	Nielsen	-	-	
	US2004/0002199	Jan. 1, 2004	Fukuyo et al.	-	-	
	US2006/0144828	July 6, 2006	Fukumitsu et al.	-	-	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Sub Class	Translation	
						YES	NO
	JP 04-111800	Apr. 13, 1992	Japan			X	
	JP 07-040336	Feb. 10, 1995	Japan			X (abstract)	
	JP 10-163780	Jun. 19, 1998	Japan			X (abstract)	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner	Date Considered
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Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Page 1 of 1 PTO Form 1449				Attorney Docket No. 46884-5497		Application No.: 10/585,451			
				Applicant(s): Kazuhiro ATSUMI et al.				Page 2 of 2	
				Filing Date: July 7, 2006		Group Art Unit:			
FOREIGN PATENT DOCUMENTS									
		Document Number	Date	Country	Class	Sub Class	<div style="display: flex; justify-content: space-between;"> <div>Translation YES</div> <div>NO</div> </div>		
		JP 11-138896	May 25, 1999	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 11-221684	Aug. 17, 1999	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 11-267861	Oct. 5, 1999	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 2000-015467	Jan. 18, 2000	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 2000-219528	Aug. 8, 2000	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 11-163403	Jun. 18, 1999	Japan			<div style="display: flex; justify-content: space-between;"> <div>X</div> <div></div> </div>		
		JP 11-177137	July 2, 1999	Japan			<div style="display: flex; justify-content: space-between;"> <div>X</div> <div></div> </div>		
		Japanese Patent Publication Kou-shou 46-24989	July 19, 1971	Japan			<div style="display: flex; justify-content: space-between;"> <div></div> <div>X</div> </div>		
		JP 06-252260	September 9, 1994	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 7-236985	September 12, 1995	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 10-202381	August 4, 1998	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		JP 2001-093864	April 6, 2001	Japan			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
		WO 2004/052586 A1	June 24, 2004	PCT			<div style="display: flex; justify-content: space-between;"> <div>X (abstract)</div> <div></div> </div>		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
		K. Hayashi, "Inner Glass Marking by Harmonics of Solid-state Laser," Proceedings of 45th Laser Materials Processing Conference, Dec. 1998, pps. 23-28, with English abstract.							
		T. Sano et al., "Evaluation of Processing Characteristics of Silicon With Picosecond Pulse Laser," Preprints of the National Meeting of Japan Welding Society, No. 66, April 2000, pp. 72-73, with English translation.							
		K. Miura et al., "Formation of Photo-induced Structures in Glasses with Femtosecond Laser," Proceedings of 42nd Laser Materials Processing Conference, Nov. 1997, pp. 105-111, with English abstract.							
		T. Miyazaki, "Laser Beam Machining Technology," published by Sangyo-Tosho Inc. on May 31, 1991, First Edition, pps. 9-10, with English translation.							
		T. Yajima et al., <i>New Version Laser Handbook</i> , published by Asakura Shoten, June 15, 1989, pps. 666-669, with English translation.							
		<i>Tooling Machine Series, Laser Machining</i> , published by Taiga Shuppan, Inc., Sept. 10, 1990, pps. 91-96, with English translation.							
		<i>Electronic Material</i> , No. 9, on 2002, published by Kogyo Chousakai, pps. 17-21, with English translation.							
		F. Fukuyo et al., "Stealth Dicing Technology for Ultra Thin Wafer", presented at 2003 ICEP (International Conference on Electronics Packaging), April 16-18, 2003, Tokyo, Japan							
Examiner				Date Considered					
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									